



DEPARTMENT OF THE NAVY
NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
WASHINGTON, DC 20361-0001

IN REPLY REFER TO
NAVAIRINST 5400.87B
AIR-1002
8 Aug 86

NAVAIR INSTRUCTION 5400.87B

From: Commander, Naval Air Systems Command
To: Deputy Commanders, Assistant Commanders, Comptroller, Command Special Assistants, Program Directors, Designated Program Managers, Program Coordinators, Directorate Directors, and Office and Division Directors

Subj: DESIGNATION OF AIRBORNE STRATEGIC COMMUNICATIONS PROGRAM (PMA271)

Ref: (a) SECNAVINST 5000.1B
(b) NAVAIRINST 5400.1B
(c) NAVAIRINST 5400.70A
(d) NAVAIRINST 5400.116
(e) NAVAIRINST 1611.1G

Encl: (1) Charter for the Airborne Strategic Communications Program Manager (PMA271)

1. Purpose. To

a. formally redesignate the Support Aircraft Program (PMA271) as the Airborne Strategic Communications (ASC) Program Office (PMA271), a designated program under the direction of the Commander, Naval Air Systems Command (COMNAVAIR);

b. assign the Program Manager (PM) and establishes his mission, authority, and responsibility (enclosure (1)); and

c. issue a charter which outlines the program's scope, operating relationships, organization and resources.

2. Cancellation. This instruction supersedes NAVAIR Instruction 5400.87A of 7 March 1978. Since this is a major revision, changes are not indicated.

3. Background

a. In 1962 an analysis of urgently needed and projected command, control, and communications (C³) requirements emphasized the need for development and deployment of an Airborne Very Low Frequency (AVLF) communications link with the strategic nuclear forces. A program was established in the Naval Air Systems Command Headquarters (NAVAIRHQ) to implement this requirement. In 1964 this capability became operational using a C-130G airborne platform designated Take Charge and Move Out (TACAMO). A series of state-of-the-art mission systems developments have been incorporated into this weapon system to produce an operational airborne, high power AVLF C³ system capable of survival and continuous performance in a stressed communications environment.



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b. Rapidly increasing strategic importance, increased military threat, improved communications countermeasures and expanded operational commitments led to the designation of this communications system from interim to permanent status as part of the defense communications system in 1978, thus elevating the program to a level requiring intensified management. The EC-130 aircraft reached the practical limit of its growth capability in the early 1980's. New and increasing operational requirements made it essential to develop a new and more capable airborne platform to continue to ensure this vital communications relay system could perform its mission.

c. In 1982, by direction of COMNAVAIR, the program management responsibility for generic support and training aircraft was transferred to the newly established Support Aircraft and Weapon Systems Program Coordination Office (APC200). PMA271 was assigned responsibility for developing and managing the approved program for the follow-on TACAMO aircraft (designated ECX) as well as the in-service EC-130's.

d. The ECX requirement called for procurement of a commercial derivative high performance long range turbo-fan aircraft with growth potential to accommodate future TACAMO mission system upgrades. Initially the ECX will be equipped with the existing TACAMO mission equipment removed from the EC-130 fleet.

4. Responsibilities. COMNAVAIR is responsible for the integration, installation, and support of systems in the EC-130Q and E-6A (formerly ECX) airborne communications platforms. The Commander, Space and Naval Warfare Systems Command (SPAWAR) is responsible for the design and acquisition of those electronic systems designated for multiplatform use by the Chief of Naval Operations. The Naval Air Systems Command (NAVAIR) maintains responsibility for the design, acquisition, installation, and support of all other subsystems utilized in ASC, subject to performance requirements established by the Minimum Essential Emergency Communications Network architect and defined jointly by NAVAIR and SPAWAR. Research, development, test, and evaluation funding for all ASC communications related systems is budgeted for by SPAWAR, with inputs from NAVAIRHQ (PMA271), and provided directly to COMNAVAIR for implementation. NAVAIR is also responsible for the successful execution of research and development (R&D), acquisition, and support of the TACAMO aircraft and its related subsystems. NAVAIR has total R&D and life cycle support responsibility for the E-6A and its communications suite, except for VERDIN, consolidated very low frequency, and other multiplatform communications subsystems.

5. Action

a. CAPT Ernest L. Lewis, USN, is designated PM of the ASC Program to organize and execute the program within the authority and direction provided by enclosure (1). The PM receives his authority from and is ultimately responsible and accountable to COMNAVAIR for the discharge of the latter's responsibilities for the management of the ASC Program. The PM reports to COMNAVAIR via the Program Director-Air for Electronics Warfare and Mission Support Programs (PDA12). PDA12 provides supervisory oversight, monitors and

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evaluates the ongoing performance of the ASC Program office throughout its life cycle, makes recommendations as appropriate, and advises COMNAVAIR of program status and progress.

b. The Deputy Commander for Program Support (AIR-01) as the acquisition executive reporting to COMNAVAIR, is responsible for developing, interpreting and issuing acquisition policy and requirements. AIR-01 is also responsible for providing a wide variety of staff support for the PM, and in conjunction with PDA12, provides coordination and advisory assistance to the PM to ensure compliance with NAVAIR acquisition management policies, practices, and compatibility with the program's goals and objectives as determined by COMNAVAIR and higher authority. In order for AIR-01 to perform as acquisition executive and provide program support duties, the PM and PDA12 will keep AIR-01 informed on significant changes in program status.

c. The functional organizations of NAVAIRHQ will support the PM as specified in references (a) through (d), and other directives that may be issued by higher authority. Reference (e) establishes other requirements and responsibilities, and is addressed in enclosure (1).

6. Approval. The charter (enclosure (1)) is hereby approved.



J. B. WILKINSON

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CHARTER FOR THE
AIRBORNE STRATEGIC COMMUNICATIONS
PROGRAM MANAGER (PMA271)

Ref: (a) SECNAVINST 5000.1B
(b) NAVAIRINST 5400.1B
(c) NAVAIRINST 5400.70A
(d) NAVAIRINST 5400.116
(e) NAVAIRINST 1611.1G

1. Introduction

a. This charter establishes the mission, authority, and responsibility of the Airborne Strategic Communications (ASC) Program (PMA271) Program Manager (PM) and outlines the program's scope, operating relationships, organization, and resources.

b. This program will be conducted following management principles identified in references (a) through (e).

2. Weapon System Description

a. ASC, commonly called Take Charge and Move Out (TACAMO), is a manned airborne, multiple frequency communications relay platform whose primary mission is to provide survivable communications connectivity from the national command authority to the fleet ballistic missile (FBM) submarine forces, and other single integrated operational plan secure reserve force elements. Additionally, Navy Warfare Publication, volume 1, Strategic Concepts of the U.S. Navy, defines warfare objectives and supports the Navy's sea control and power projection functions. To meet these objectives, ASC has been established as an integral part of the Minimum Essential Emergency Communication Network (MEECN), and as such, must maintain compatibility with other MEECN assets. This requires close coordination to ensure communications net interoperability. The MEECN engineering architect and a controlling body is the Defense Communications Agency with the Commander, Space and Naval Warfare Systems Command delegated naval architecture responsibilities.

b. The TACAMO program was initiated by specific operational requirement W-32-31 dated 1 May 1962. Tasked with providing an interim program for survivable communications in support of the FBM submarine operations, TACAMO became operational in 1965. Advanced development objective 15-08X, dated 21 June 1968, directed the development of a more powerful airborne very low frequency transmitter, high speed very low frequency antenna system, and an adjunct subsystem VERDIN to enhance TACAMO performance. Subsequent communication enhancements resulted in a TACAMO configuration which evolved through two major TACAMO improvement programs (TIP's), TIP phase I and TIP phase II, with phase II becoming fully operational in the fiscal year (FY) 1980 through FY 1982 time period.

c. Program Objective Memorandum FY 1980 authorized the increase of the TACAMO EC-130 force level to 18 unit equipped aircraft to support the expanded requirements. The aircraft are operated by Fleet Air Reconnaissance Squadron, Atlantic (VQ-4) and Fleet Air Reconnaissance Squadron, Pacific (VQ-3). VQ-3 was relocated in Hawaii during July 1981.

d. Increased operational requirements and constraints on systems operation led to the competitive acquisition of a replacement aircraft, designated the E-6A (formerly ECX). Prototype development and production program definition were started in FY 1983. The overall performance characteristics and system performance levels are classified and are found in the Office of the Chief of Naval Operations (OPNAV), Operational Requirement (OR) for TACAMO ECX issued in January 1982. Copies of the OR and other documents cited in this paragraph are held by the PM at the Naval Air Systems Command Headquarters (NAVAIRHQ). The E-6A is scheduled for delivery to the fleet beginning FY 1989 and completing in FY 1991.

3. Program Scope

a. The program's scope consists of the concept formulation, definition, development, test and evaluation, acquisition, and life cycle support of the ASC systems. This includes subsystems and components thereof, modifications and new systems, spares, repair parts, peculiar and common support equipment, weapon system trainers and flight simulators, naval air maintenance trainers, and all supporting technical documentation. Procurement of ASC systems will include quantities for the Navy and specified quantities of systems or subsystems for foreign governments.

b. The Five Year Defense Program funds assigned to the PM for obligation to execute program objectives are included in program element 11402N, project units X0793 (TACAMO) and W1483 (E-6A), as well as other funds that may be assigned to directly support the ASC Program.

c. The E-6A is designated as a major materiel professional program. Further, the E-6A program has been assigned acquisition category IIS as defined in reference (a).

4. Authorities and Responsibilities

a. General. As prescribed in reference (a), the PM is the single central executive responsible for successfully managing the program and accomplishing the objectives stated in this charter. The PM's primary mission is to satisfy approved operational requirements by providing the Navy's operating forces with fully developed, reliable, and supportable weapon systems. To ensure program effectiveness, the PM will establish and sustain an ongoing program to develop technical and business alternatives to meet emerging airborne strategic communication needs. He will also manage acquisition and support of similar systems for foreign governments, when required, to support foreign military sales or other defense security assistance programs (DSAP's). He has broad directive authority within the scope of the program to plan, direct, control, and use resources not only of the approved program, but all program related in-house and contractor organizations, including assignment of

responsibility as appropriate, to the various NAVAIRHQ functional organizational elements within the overall framework outlined in references (a) through (d).

b. Specific Responsibilities. As the responsible executive, the PM is expected to act on his own initiative in matters affecting the program. In those cases where action is required beyond the authority granted in this charter, he will refer the action to higher authority with his recommendations, including alternatives available. Per reference (a), when an official with line authority above the PM exercises decision authority, on program matters, a copy of that decision will be forwarded to the systems commander and (as appropriate) to the OPNAV resource sponsor (OP941) to document official program direction to the PM. The line official will be held accountable for the decision.

c. Specific Authorities. The PM is authorized to prepare and sign fitness reports for all military personnel, commander and below, assigned full time to the program office and to execute performance evaluations as applicable for civilian personnel assigned full time to that office. He may submit, at his discretion, concurrent fitness reports on other officers junior to him and concurrent evaluations on civilian employees working for him in functional management under the authority of this charter (reference (e)).

5. Limitation of Authority. Limitations of the PM's delegated authority are as follows:

a. The PM does not have the authority to deviate from established policy.

b. Communication, action, or inaction, in any form that contractors may interpret as directional will be conducted through an appropriately assigned contracting officer.

6. Relationships to Chartering Authority. The PM receives his authority from and is ultimately accountable to the Commander, Naval Air Systems Command (COMNAVAIR) for discharge of the latter's responsibility for the management of the ASC program. The PM reports directly to the Program Director-Air for Electronic Warfare and Mission Support Programs (PDA12) who provides policy determination and requirements definition. Matters requiring COMNAVAIR's attention will first be coordinated with PDA12 who will, if possible, accompany the PM to see COMNAVAIR. When PDA12 is unavailable and urgency dictates immediate communication with COMNAVAIR, the PM will brief PDA12 as soon as he is available.

7. Specific Interface and Operating Relationships. The PM will accomplish the following:

a. Coordinate appropriate interface segments of the program with other PM's and systems commands to ensure a totally coordinated effort and to ensure weapon systems integration by establishing and issuing design interface specifications. Unresolved interface problems will be referred directly to the appropriate senior management official.

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b. Respond to the DSAP requirements. When required by the recipient foreign country, the PM will provide overall initiation, guidance, coordination, and review of United States contracts and Navy efforts in logistically supporting and sustaining in-country inventory of weapon systems under his cognizance. The PM will also maintain close liaison with and maximum responsiveness to the Defense Security Assistance Division (AIR-103), Naval Supply Systems Command (SUP-07), and OPNAV (Op-63), on DSAP matters.

c. Maintain active liaison with cognizant program coordinators in OPNAV following the Navy Programming Manual. The PM will keep the foregoing personnel fully informed of the status and progress of the program through formal and informal communications.

d. Inform the Commander, Naval Military Personnel Command (COMNAVMILPERSCOM) of military personnel requirements for the weapon system. This information normally will be transmitted to COMNAVMILPERSCOM through the cognizant OPNAV coordinator.

e. Review operational requirements, including inventory objectives established by higher authorities for the program, to ensure timeliness, accuracy, consistency, and compatibility of program plans and funding availability. When the PM cannot resolve inconsistent or incompatible requirements and objectives, he will submit the problems and recommendations in writing to COMNAVAIR and appropriate higher authorities for resolution.

f. Establish appropriate requirements for, and monitor the acquisition of, special or additional facilities necessary to support test, evaluation, installation, operation, and maintenance of the ASC and supporting devices. The PM will ensure that facilities planning factor criteria are developed with Naval Facilities Engineering Command Headquarters (NAVFAC Code 2013) representatives and published in NAVFAC P-80; and he will further inform participating organizations of requirements for new facilities and for modifications to existing facilities so that planning, programming, and construction schedules will be responsive to ASC support.

g. Maintain liaison with cognizant personnel at Naval Air Systems Command (NAVAIR) test and evaluation activities during developmental test and evaluation and jointly assure COMNAVAIR of the readiness of the systems for operational evaluation and fleet use. Further, he will maintain active liaison with cognizant personnel in OPNAV, the Operational Test and Evaluation Force, and the Office of the Secretary of Defense on the operational test and evaluation of the weapon system.

h. Maintain active and direct liaison with program management offices responsible for joint programs or programs related to ASC in other system commands (including other services, agencies and allied nations) to ensure adequate planning, integration, and coordination of program research and development (R&D) efforts. The PM will provide for implementation of requirements for other multiplatform systems (to be determined) and initiate new or comply with any existing memorandums of agreement concerning ASC relevant programs. He will assure that support efforts in response to new

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requirements or changes in the baseline weapon system, as a result of any R&D efforts, are adequate and timely.

8. Program Staffing and Organization. The program office will be organized and will function under the direction of the PM. Its organization is shown in appendix A. Per reference (a), specific responsibility for the following functions must be assigned:

Business/Financial Manager
Technical Manager/Systems Engineer
Logistics Manager
Contracting Officer
Financial Execution Officer

9. Participating Organizations

a. All elements of NAVAIRHQ will support the PM following responsibilities in references (a) through (d). The PM is authorized direct liaison with all NAVAIRHQ divisions and directorates in fulfilling his responsibilities. Key functional support codes are shown in appendix B. When disagreement occurs, actions directed by the PM will be continued or instituted until resolution.

b. Systems commands will support the PM according to assigned material support responsibilities.

c. Field activities participating in the program are listed in appendix C. The Naval Air Development Center has been designated as the lead laboratory for EC-130/E-6A (TACAMO). The PM is authorized direct liaison with all NAVAIR field activities concerned with the program (reference (c)). Formal work assignments to NAVAIR activities will be coordinated through the appropriate functional organization in NAVAIRHQ. Work assignments to activities not under NAVAIR control will be developed with cognizant headquarters' organizations according to established procedures.

10. Priority. The TACAMO (ASC) program has been assigned a fleet activity designator one by the Secretary of Defense.

11. Congressional and Public Information. COMNAVAIR is responsible for coordinating and disseminating public information on the ASC systems within the Department of the Navy to legislative bodies, to industry, and to the general public. This responsibility has been delegated to the Legislative and Public Affairs Office (AIR-07D).

12. Resources Assessment

a. The PM will evaluate and document the effect of proposals to increase or decrease the resources authorized to execute the program and will determine the effect of proposed changes on approved cost, schedules, procurement plans, and performance objectives. Officials having final decision authority during programming, reprogramming, and budgeting deliberations will consider the PM's evaluation.

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b. The PM will formally inform OPNAV, through channels, of any instance where program requirements cannot be met within available resources and time.

13. Program Transition or Disestablishment. This program will be reviewed periodically to determine if it has accomplished its objectives. If the review indicates the objectives have been or are about to be accomplished, the PM will develop a transition plan to ensure a smooth disposition of remaining resources, responsibilities, and functions.

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graph TD
    PMM[PROGRAM MANAGER  
AIRBORNE COMMUNICATIONS  
PMAZ71  
CAPT.. USN] --- DPM[DEPUTY PROGRAM MANAGER  
PMAZ71-A  
GM-301-16]
    PMM --- PPO[PMS & PROGRESS OFFICER  
PMAZ71C  
LCDR. USN]
    DPM --- FMS[FMS MANAGER  
PMAZ71-3  
GM-300-15]
    DPM --- PAAS[PROGRAM ASSISTANT  
PMAZ71B  
GS-310-08]
    DPM --- SEC[SECRETARY  
PMAZ71AB1  
GS-310-09A]
    FMS --- BFM[BUSINESS AND FINANCIAL MANAGER  
PMAZ71B  
CDR. EC. USN]
    FMS --- FEOP[FIN EXEC OFFICER  
PMAZ71B2  
GS-000-12]
    BFM --- BA1[BUDGET ANALYST  
PMAZ71B3  
GS-000-12]
    BFM --- BA2[BUDGET ANALYST  
PMAZ71B4  
GS-000-S1U12]
    FEOP --- PA1[PROGRAM ANALYST  
PMAZ71B1  
GS-300-12]
    FEOP --- DP1[DEPUTY FOR E-6A  
PMAZ71-1  
GM-001-14]
    DP1 --- EVOP[E-6A AIR VEHICLE DEVELOPMENT OFFICER  
PMAZ71-1A  
CDR. USN]
    DP1 --- CCO[E-6A CONFIGURATION CONTROL OFFICER  
PMAZ71-1B  
GM-301-13]
    DP1 --- SES[SYSTEMS ENGINEER  
PMAZ71-2A  
GM-000-13]
    DP1 --- MO[NADNESS OFFICER  
PMAZ71-2B  
LCDR. USN]
    DP1 --- DE1[DEPUTY FOR EC-130  
PMAZ71-2  
CDR. USN]
    DE1 --- PA2[PROGRAM ANALYST  
PMAZ71-4B  
GS-300-S1U12]
    DE1 --- SE[SYSTEMS ENGINEER  
PMAZ71-4A  
GM-001-15]
    DE1 --- DAS[DEPUTY FOR ADVANCED SYSTEMS  
PMAZ71-4  
GM-114]
    DAS --- JPD[JOINT PROGRAMS]
    DAS --- AFB[AIR FORCE]
    JPD --- PA3[PROGRAM ANALYST  
PMAZ71-5  
GS-300-13]
    AFB --- AFM[AIR FORCE MAJLST]

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OTHER KEY MANPOWER RESOURCESASSISTANT PROGRAM MANAGERS AND PROGRAM SUPPORT OFFICERS

<u>TITLE</u>	<u>CODE</u>
Assistant Program Manager, Engineering	AIR-5114E
Assistant Program Manager, Logistics	AIR-41021B2
Production	ESA-20321
Contracts	AIR-21429/21511
Support Equipment	AIR-55211C
Avionics	AIR-546
Propulsion	AIR-53621
Weapon Training and Training Equipment	APC205
Financial Execution Officer	AIR-08X

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ACTIVITIES PARTICIPATING IN THE PROGRAM

<u>Activity</u>	<u>Location</u>	<u>Example of Work</u>
Naval Air Development Center	Warminster, PA	Lead laboratory for TACAMO/ECX (E-6A)
Naval Ocean Systems Center	San Diego, CA	Operational and executive software
Naval Surface Weapons Center	Dahlgren, VA	Electromagnetic effects, analysis, and testing
Naval Avionics Center	Indianapolis, IN	Avionics systems support
Naval Air Test Center	Patuxent River, MD	Test and evaluation of system improvements